REMARKS

Claims 104, 109-111, 114, 119, 130, 135, 136, 139, 144, 145, and 149-168 were pending in the application and stand rejected in the Office Action issued June 1, 2007. With this response, claims 114, 135, 136, 144, 145, and 154-158 are cancelled and new claims 169-174 are added. Upon entry of the amendments, claims 104, 109-111, 114, 119, 130, 139, 149-153, and 159-174 remain pending.

Applicants note the Office Action does not mention the pending nature of claims 110-111 and 119, apparently because the claims were inadvertently omitted from the claim listing of Applicants' amendment of 15 September 2006. Applicants did not cancel the claims, so they remain pending. Applicants' intention to keep the claims pending is also seen in the Appendix A attached to the September 2006 amendment, showing claims 110-111 and 119.

Support for the amendments is found in the specification as originally filed. The main claims are amended to recite the compression deformable temperature is below the melting temperature. Applicants respectfully request entry of the amendments.

OBJECTION TO THE APPLICATION

The application is objected to as lacking the written consent of all assignees. In response, Applicants offer a proper assent of the Assignee in compliance with 37 C.F.R. § 1.172, and a newly executed Statement under 37 CFR 3.73 and Power of Attorney. Applicants respectfully request the objection be withdrawn.

OATH/DECLARATION

The claims are rejected as being based on a defective reissue application declaration under 35 U.S.C. § 251. The reissue declaration filed with the application is said to be defective

because it does not identify the foreign application in which priority is claimed. The reissue oath/declaration is said to be defective for the further reason that it fails to identify at least one error relied upon for the reissue application.

Applicants are obtaining a new reissue oath/declaration that overcomes the above listed objections. It will be provided prior to allowance of the present divisional application.

REJECTION UNDER 35 U.S.C. § 251

The claims are rejected under 35 U.S.C. § 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the reissue is based, U.S. Patent No. 6,168,626. Applicants respectfully submit the claims are not barred by the recapture rule because the broader aspects of the reissued claims do not relate to subject matter surrendered during prosecution. Applicants submit that the public is not prejudiced or surprised by the scope of the reissue claims, and the claims are not disfavored by the equitable nature of the recapture rule. Accordingly, Applicants respectfully traverse the rejection and request reconsideration.

A reissue is available whenever any patent is, through error and without deceptive intention, deemed wholly or partly inoperative or invalid by reason of the patentee claiming more or less than he had a right to claim in the patent. 35 U.S.C. § 251. A reissue patent can be granted enlarging the scope of the claims of the original patent if it is filed within two years from grant from the original. *Id.* Furthermore, of particular relevance to the present case, the statute relevant to divisional applications is applicable to reissue applications. *Id.* It provides that when

two or more "independent and distinct" inventions are claimed in one (reissue) application, the director may require restriction to one of the inventions. 35 U.S.C. §121.

The recapture rule is said to prevent a patentee from gaining, through reissue, the subject matter that he surrendered in an effort to obtain allowance of the original claims. Recapture is analyzed by a three step process. The first step is to determine whether and in what aspect the claims are broader than the (original) patent claims. The second is to determine whether the broader aspects relate to surrendered subject matter. If the first two determinations are positive, then recapture bars the claims unless it is determined in a third step that the reissued claims are materially narrowed in other aspects to avoid the recapture rule. *Pannu v. Storz Instruments, Inc.* 258 F.3d 1366, 59 USPQ 2d 1597 (Fed. Cir. 2001); MPEP 1412.02.

Applicants submit that the present claims are not barred by the *Pannu* recapture rule for two basic reasons.

- First, the present claims are directed to a different invention than that prosecuted in the issued parent patent.
- Second, even if the present claims were improperly viewed as being the same invention
 as those issued in the '626 Patent, they are materially narrowed in other aspects so as to
 avoid recapture.

Reissue claims are distinct from the original claims of the issued US 6,168,626 parent patent.

The current reissue claims are drawn to an invention that is independent and distinct from that of the original claims. In the broadening reissue application, U.S. Application Serial No. 10/141,374, filed May 8, 2002, the Office required restriction between the current claims and the

_

¹ This statutory phrase is interpreted and applied by the Patent Office as though it read "independent or otherwise distinct" See MPEP §802.01.

un-amended claims of the issued '626 Patent. In that restriction requirement, Claims 1-11 were the original claims (i.e. the claims to the invention of issued U.S. Patent No. 6,168,626), and were classified as Invention I. Those claims have since been examined, and their patentability confirmed. Other claims were classified in eleven total distinct and independent inventions.

Broadening aspects of the claims are not related to surrendered subject matter

Reissue claims to an invention that is independent and distinct from the issued patent claims may be broader than the claims of the issued patent, if presented within two years of the issuance of the patent. Whether such claims are broader or more narrow, they are inherently "new" claims, having never before been examined or considered. Applicants are entitled to file such independent and distinct claims, as long as the application otherwise provides support for the new claims.

Although the public is entitled to rely on subject matter surrendered during prosecution to establish its own ability to practice the claimed invention, such reliance does not reasonably extend to independent and distinct inventions not claimed, but not yet barred by the passage of two years from issue of the original claims. As noted above, the patent statute permits distinct inventions to be claimed in a reissue application filed within two years of the original claims. The public reading the original claims and the prosecution leading to their allowance would not consider that subject matter allegedly surrendered in the original claims could not be covered by later filed claims to an independent and distinct invention. In light of the statutory provisions, such consideration would not be reasonable.

Applicants' remarks and amendments in pursuit of the original claims of the '626 Patent thus are not relevant to the scope of claims to a patentably distinct invention in a reissue divisional case like the current one. Any difference in scope between the original and the current

claims is not ascribable to surrendered subject matter. Instead, the differences reflect the fact that the current claims are indeed "independent and distinct." Because they are drawn to a distinct invention, the reissue claims are separately patentable over the prior art, for reasons that may be different. Because the inventions are distinct, it is to be expected that a search for such a distinct invention would turn up different art and/or that the art found in the search may be applied in a different way to the subject matter of the claims². It thus follows that arguments made for the patentability of a first set of distinct claims do not determine the scope of claims to a second distinct invention, since art is necessarily applied differently to the two inventions.

Therefore, any broadening aspects present in the distinct reissue claims will not be related to surrendered subject matter in the original claims. Because they are distinct from the original claims, their scope is not related to, and does not reflect, subject matter allegedly given up by amendment or argument during prosecution of the original claims. Rather, broadening aspects relative to the original claims are due solely to the fact that the reissue claims are drawn to an "independent and distinct" invention.

Thus, the subject matter of the present application is not the same subject matter of the original '626 Patent. Analysis for recapture is thus inapposite under the three prong analysis adopted by the Court of Appeals for the Federal Circuit in *Pannu*. Applicants respectfully request that the rejection of the claims as being an improper recapture be withdrawn.

Claims reciting heating below the melting point are materially narrowed in an aspect not completely unrelated to the rejection, and avoid the recapture rule

Further, even if it were to be held that broader aspects in the current reissue claims are related to surrendered subject matter, the amended claims -- reciting heating below the melting

-

² Indeed, restriction among distinct inventions is only justified if, in addition, a search of the distinct inventions together would impose a "serious burden" if restriction is not required. MPEP § 808.

point -- do not fail the third prong of the *Pannu* recapture analysis. That is, in any event, the reissue claims are materially narrowed in other respects to avoid the recapture bar.

In *In re* Clement, 45 USPQ2d 1161 (Fed. Circ. 1997), the Court elaborated on the determination whether reissued claims are materially narrowed to avoid the recapture rule. As pertinent here, condition 3a) of the analysis reads

"If the reissue claim is as broad as or broader in an aspect germane to a prior art rejection, but narrower in another aspect completely unrelated to the rejection, the recapture rule bars the claim...."

Clement, 45 USPQ2d at 1165. The above statement of the rule necessarily implies that the recapture rule does not bar the claim if the reissue claim is narrower in an aspect that is not completely unrelated to the rejection. That is, to avoid the recapture rule, a narrowing aspect offered in a reissue claim must be somehow related to the rejection (and not "completely unrelated to the rejection"). Applicants submit the rule may be restated in a "permissive" form:

If the reissue claim... [is] narrower in another aspect <u>not</u> completely unrelated to the rejection, the recapture rule <u>does not</u> bar the claim.

The reissue claims are now discussed with these principles in mind.

Claims 43, 87, 114, and 131 contain a narrowing aspect that is not "completely unrelated" to a claim rejection made during prosecution of the parent '626 Patent. They recite that the compression deformable temperature is below the melting point of the UHMWPE of the article. This is a narrowing aspect with respect to the parent claims, which recite a compression deformable temperature without a limit. But the narrowing aspect is not completely unrelated to the claim rejection in the '626 Patent. Rather, as demonstrated below, had the recitation of a compression temperature below the melting point been presented by amendment during prosecution, the claims would have distinguished over the art applied in the prosecution of the '626 Patent. For this reason, the narrowing aspect is definitely related to the claim rejection, or

at least is not "completely unrelated" to the rejection. As a result, the claims escape the recapture rule according to the analysis of the *Pannu* case.

The reference of the limitations in the current claims to the prosecution of the parent claims is now discussed. Amendment B responded to rejection of the parent claims over U.S. Patent No. 5,030,487, Rosenzweig. In the Rosenzweig reference, UHMWPE is expanded after crosslinking to make a heat shrink material that returns to its original shape upon heating. Applicants respectfully submit that Rosenzweig did not suggest compression deforming a crosslinked UHMWPE as in the rejected claims. Thus, the claims were patentable over Rosenzweig even without amendment. Further, had the claims at that time been amended to recite that the compression deformation was carried out at a temperature below the melting point, the claims would have even further distinguished from the reference. For this reason, the recitation that compression deformation is carried out below the melting temperature is not completely unrelated to the claim rejection — it is related to the claim rejection in that it would have been sufficient to make the claim patentable.

In Amendment F, the claims were amended from "molded article" to a "molded block" in part to distinguish over U.S. Patent No. 3,886,056, Kitamaru et al., which disclosed fibers, films, and sheets. But Applicants note that Kitamaru called for making the fibers, films, and sheets, by heating the UHMWPE above the melting point and applying pressure. The recitation of compression deformation at a temperature below the melting point would have distinguished the reference without the other amendments. Thus, the narrowing aspect of compression deformation below the melting temperature is not "completely unrelated" to the rejection.

Similarly, in Amendment G, the parent claims were amended to recite a block having dimensions of 5 to 10 mm to distinguish over Kitamaru. But, as in Amendment F, an amendment at that time to recite a compression deformation temperature below the melting point

of the UHMWPE would have distinguished over the reference. For this reason, such a narrowing amendment offered in the reissued claims is <u>not</u> "completely unrelated" to the rejection.

Finally, in Amendment H, Applicants argued that the claims (reciting keeping the "deformed state under pressure") distinguished over Kitamaru. Applicants stated "[in the reference], the rolled sheet from the rolls is free of pressure and then solidified without application of pressure." But Applicants also stated "that, in the Kitamaru reference, the polyethylene is heated <u>above</u> the melting point before it is compressed and cooled." For this reason, an amendment at that time to recite that compression deformation is carried out <u>below</u> the melting point would have distinguished the reference. For this reason, the narrowing aspect of compression deformation below the melting point is <u>not</u> "completely unrelated" to the rejection.

For all of the reasons discussed above, Applicants respectfully submit that the reissue claims do not violate the recapture rule. Accordingly, Applicants respectfully request the rejection be withdrawn.

REJECTION UNDER 35 U.S.C. § 102

Claims 104, 109, 114, 149-152, and 154-157 are rejected under 35 U.S.C. § 102(b), as anticipated by the Kitamaru reference (U.S. Patent No. 3,885,056). Applicants respectfully traverse the rejection as applied to the amended claims and request reconsideration.

As stated in the Office Action, the reference discloses heating to a molten state, extending the polyethylene under increased pressure and cooling the article while the extended dimension is maintained. It thus fails to disclose many of the features of the rejected claims.

The reference does not disclose compression deforming a heated article. Rather, the reference discloses heating to a <u>molten</u> state and <u>extending</u> the polyethylene under pressure. The point of the reference is to make a heat shrinkable material. Applicants respectfully submit that the compression deforming of the claims is different from the extending of the reference. Furthermore, the current claims call for cooling the main article while maintaining the deformed state, which is different from cooling while maintaining the extended dimension of the reference. Because the reference fails to disclose at least one limitation of the rejected claims, rejection under § 102 is improper. Accordingly, Applicants respectfully request the rejection be withdrawn.

Moreover, the rejected claims have been amended to recite that compression deforming is carried out at a temperature below the melting point, which further distinguishes from the reference, which teaches only melting and extension. For this additional reason, Applicants respectfully request the rejection be withdrawn.

REJECTION UNDER 35 U.S.C. § 103

Claims 104, 109, 114, 130, 135, 135, 136, 139, 144, 145, and 149-168 stand rejected under 35 U.S.C. § 103(a) as obvious over the Kitamaru reference and 154-157, and further in view of the Zachariades reference (U.S. Patent No. 5,030,402). Applicants respectfully traverse the rejection as applied to the amended claims and request reconsideration.

The deficiencies of the Kitamaru reference as applied to the amended claims are discussed above. The Zachariades reference does not make up for those deficiencies. Accordingly, Applicants respectfully request that the rejection be withdrawn.

DOUBLE PATENTING

The claims are provisionally rejected on the grounds of non-statutory obviousness-type

double patenting over the claims of co-pending application 11/522,504. Applicants note that this is

a provisional rejection at this time because the conflicting claims have not in fact been patented.

Applicants believe no action is needed to make a fully responsive reply. For this reason, Applicants

reserve the right to obviate the rejection in the future by filing a Terminal Disclaimer, once

patentable subject matter is determined in the current case.

CONCLUSION

For the reasons discussed above, Applicants believe that claims are in an allowable

condition and respectfully request an early notice of allowance. The Examiner is encouraged to

telephone the undersigned if that would be helpful to resolving any issues.

Respectfully submitted,

Dated: Deenla 3, 2007

David L. Suter, Reg. No. 30,692

Mark A. Frentrup, Reg. No. 41,026

HARNESS, DICKEY & PIERCE, P.L.C.

P.O. Box 828

Bloomfield Hills, Michigan 48303

(248) 641-1600

DLS/MAF/cg/kq

Page 16 of 16